

Claims

1. Arrangement for closing an opening of a motor vehicle, with a pane (12), a layer (14) of cement material which acts as a flat shatterproofing element being attached with one side securely to the pane, the other side of the layer of cement material being used to cement at least one attachment part (18, 20, 30, 32, 34) to the pane, the attachment parts being a reinforcing element (18) for the pane, a retaining element (30, 32, 34) for connecting the pane to the vehicle body or an element (38) connected to the vehicle body, or a visor.

2. Arrangement as claimed in claim 1, wherein the attachment part is the inside cover sheet metal (30), a reinforcing section (18) or a section (32, 34) which is used as a contact surface for a seal (26) or a cement connection (36) to a body-mounted frame (38).

3. Arrangement as claimed in claim 1 or 2, wherein the attachment part (18, 20, 30, 32, 34) is located in the edge area of the pane (12).

4. Arrangement as claimed in one of the preceding claims, wherein the layer (14) of cement material completely covers at least the transparent area of the pane (12).

5. Arrangement as claimed in one of the preceding claims, wherein the side of the layer (14) of cement material pointing away from the pane (12) in the areas outside the area provided with the attachment part (18, 20, 30, 32, 34) is covered at least in part with a cover film (16).

6. Arrangement as claimed in claim 5, wherein the cover film (16) is made scratchproof, with an embossed surface and/or tinted.

7. Arrangement as claimed in claim 6, wherein the cover film (16) is made from PET, PC, or PMMA.

8. Arrangement as claimed in one of the preceding claims, wherein the cement material of the layer (14) is PU, PVB, EVA or ionomers.

9. Arrangement as claimed in one of the preceding claims, wherein the cement material of the layer (14) is applied to the pane (12) in sheet form or film form.

10. Arrangement as claimed in one of the preceding claims, wherein the pane (12) is a pane of transparent or partially transparent glass.

11. Arrangement as claimed in one of the preceding claims, wherein the layer (14) of cement material toward the edge of the pane (12) does not extend beyond the position of the attachment part (18, 30, 32, 34).

12. Arrangement as claimed in one of the preceding claims, wherein the area (24) between the attachment part (18) and the edge of the pane (12) is used as a contact surface for a seal (26).

13. Arrangement as claimed in one of the preceding claims, wherein the arrangement is a cover (10) and the opening is a roof opening.

14. Arrangement as claimed in claim 13, wherein the cover (10) is adjustable and the attachment part is a retaining element (20, 30) which is connected to the positioning mechanism.

15. Arrangement as claimed in one of claims 1 to 13, wherein the attachment part is a retaining element (34) which is tightly cemented into the roof frame (38).

16. Arrangement as claimed in one of the preceding claims, wherein the pane (12) in the area of the attachment part (18, 30, 32, 34) is imprinted with a frit (22).

17. Arrangement as claimed in claim 8, wherein the cement material of the layer (14) is a material consisting of ethylene/methacrylic acid copolymers.

18. Arrangement as claimed in one of the preceding claims, wherein the cement material of the layer (14) has a tear strength of at least 15 MJ/m³, preferably at least 25 MJ/m³.

19. Arrangement as claimed in one of the preceding claims, wherein the cement material of the layer (14) has a tensile strength of at least 10 MPa, preferably at least 20 MPa.

20. Arrangement as claimed in one of the preceding claims, wherein the cement material of the layer (14) has a modulus of elasticity of at least 50 MPa, preferably at least 150 MPa.